Owner's Manual

Stello DP200

Selectable Upsampling DAC/Preamp &
Headphone Amplifier
(Optional Phono Equalizer, Upsampled Analog-Digital Converter)

April Music, Inc.

INTRODUCTION

Thank you for choosing Stello DP200 DAC/PREAMP from April Music.

DP200 is a highly versatile digital and analog convergence product that includes high-end 2 channel preamplifier, 24Bit/192kHz selectable upsampling D-A converter, and a quality headphone amplifier in one chassis.
You can also get optional phono module (MM/MC) and optional A-D converter module which supports up to 24Bit/96kHz upsampling output.

UNPACKING & CAUTION

The Stello DP200 was carefully packed at the factory to prevent any damage during transportation.
We recommend you to take time to carefully examine the unit. Should you find any signs of impact or damage, please contact your dealer or April Music prior to using DP200.

The voltage for every unit is set to the countries shipped. If you want to change internal voltage for use in the different countries, you should contact the dealer from whom you purchased the DP200 or the dealer nearest of you. Or check with www.aprilmusic.com for the voltage selection service when you travel.

Do not open the cover except for changing the gain of the Phono module.
Even for the change of Phono cartridge setting, we strongly recommend to contact your local April Music dealer.

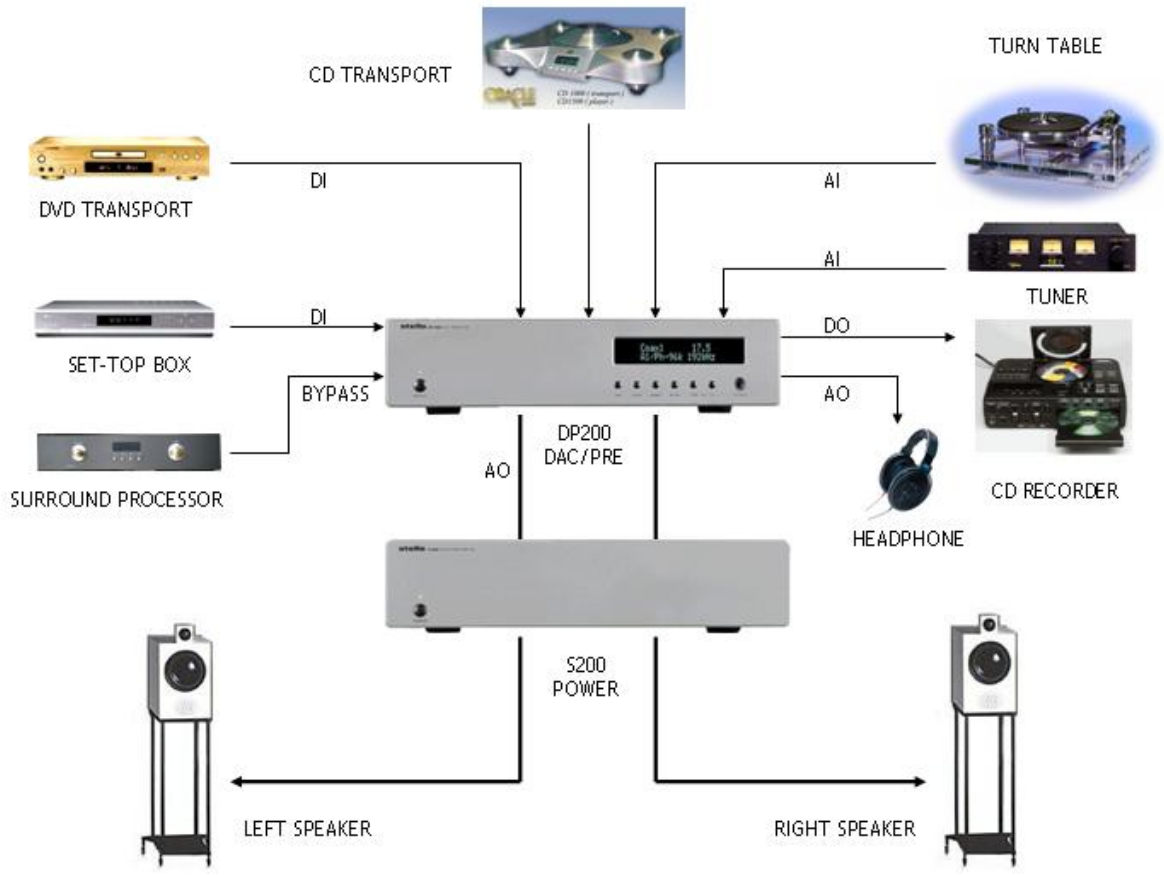
ACCESSORIES

You should have found the following accessories in the box.

- Remote Control
- Owner's Manual
- Power Cord
- Allen key for the screws of the chassis and remote control

DP200 FEATURES

[Fig. 1] The DP200 Hook-Up Diagram



Pure High-End Preamplifier

The Stello DP200 is designed with state-of-the-art preamplifier technology to guarantee the full fidelity of high-end sound. Digital volume control, separate dual mono design, all discrete class A circuit keep DP200 running as a pure high-end preamplifier. A mode selection switch on the rear panel should remain in ‘variable’ mode so that DP200 can be used as a preamplifier. Turning this to ‘fixed mode’ fixes the output level of the DP200 making it into a dedicated DAC/Phono amplifier.

- **Analog Output (Pre Out)**
  1 x Balanced Output (XLR)
  1 x Unbalanced Output (RCA)

- **Analog Input**
  1 x Balanced Input (XLR)
  2 x Unbalanced Inputs (AUX 1 is used as Phono input when P1 Phono Module is installed)

  Class A Push-Pull Output Stage
  CS3310 Volume Control Chip
  Two entirely separate toroidal transformers for the Digital and Analog sections

Upsampling (24Bit/192kHz) Digital to Analog Converter (Rate Selectable)

DAC section of the Stello DP200 supports an upsampling up to 24Bit/192kHz. And the sampling rate is selectable by the user. All Sampling Rate Selection and Digital Input Selection can be made using either the front panel buttons or the remote control. 4 Digital Inputs are supplied. They are one AES/EBU (Balanced), 2 Coaxial (RCA), and an Optical (Toslink) Input.
Specially designed digital filtering circuitry is adopted at the end of Delta-Sigma DAC section. This 6th order digital filter, which is not usual for a normal DAC, provides excellent signal to noise ratio and much cleaner background to allow the beautiful timbre of the music to shine through.
For a jitter-free signal, special PLL circuit is applied in the DAC section.

Headphone Amplifier

The DP200 is equipped with a headphone jack on the front panel. The headphone amplifier in the DP200 is not just a combination of some OP amps like the ordinary mid-priced headphone amplifiers in the market.
Custom designed headphone interface circuitry is adopted at the end of the analog stage which is activated to support the full functionality of DP200 as a pure headphone amplifier.

Phono Stage Module (optional)

An **Optional MM/MC Phono Stage (P1 Module)** is available for DP200. A simple setting allows both MM (Moving Magnet) and MC (Moving Coil) cartridges with 6 different gain settings and 6 different load impedance settings so that you can hook up most of the quality cartridges in the market.

Upsampled (24Bit/96kHz) Analog to Digital Converter (optional)

3 digital outputs are ready for digital recording. They are 1 Balanced (AES/EBU), 1 Coaxial (RCA), and 1 Optical (Toslink). Additionally, if you install the optional **ADC-1 Analog to Digital converter** (bypass or upsampled to 96 kHz) inside DP200, you can record any analog sources such as LPs, tapes, and radio broadcasts with a studio quality sound. The quality of analog to digital conversion in ADC-1 module is that of studio quality and all components are studio grade. You can get better quality recording than that of the analog to digital converters which are preinstalled in most of digital recorders. All operations are done by the remote control and display window.

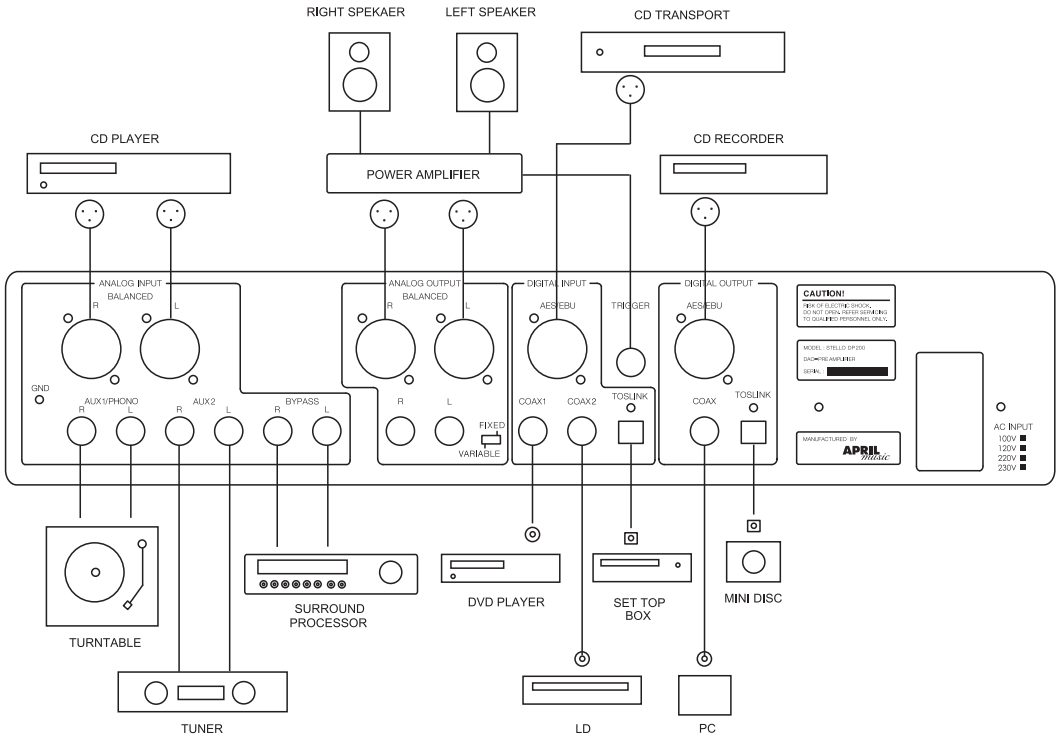
BYPASS (Input for surround processor)

For those who want to use their stereo system as a front 2 channel of the surround sound, the DP200 provides a ‘BYPASS’ input. Simple connection from the main out from your surround processor to this RCA type ‘BYPASS’ input will enable you to use the main front 2 speakers for both high quality music listening and home theater use.

INPUT & OUTPUT CONNECTIONS

There are 2 Analog Outputs, 3 Analog Inputs, 4 Digital Inputs, 3 Digital Outputs and a ‘Bypass’ input. Also included is a 12V trigger output for automatic on/off switching of the other components.

[Fig. 2] The Rear Panel



ANALOG INPUT

- **BALANCED**

  XLR Balanced input is used for the finest quality sound. Connect your equipment that has a XLR/Balanced Output by using a dedicated Balanced Interconnect cable.

- **AUX1, 2**

  Unbalanced source components can be plugged into these inputs, such as FM Tuner, Tape-Out, VCR-Out. **When the optional Phono Module is installed in DP200, AUX 1 is used as a Phono input.**

- **BYPASS**

  For home theater use only. Connect the main out from your surround processor to this 'BYPASS' input. When in BYPASS mode, the volume control of DP200 is disabled. You should control the volume through the surround processor. **The display window on the front panel shows "BYPASS MODE"** Another press of BYPASS button returns to normal DP200 status.

Main Output

Both Balanced and Unbalanced outputs are provided for the power amplifier connection. Both outputs can be used at the same time in case of bi-amping application. We strongly recommend the use of Balanced connection in normal mode.

*** Caution!**

FIXED/VARIABLE Output Mode Setting

DP200's default setting is 'VARIABLE' mode. If you want to use DP200 just as a fixed output DAC/Phono amp, you should change the mode setting switch to a 'FIXED' mode. Care should be taken when you change the setting. Power should be off during the change and a preamplifier should be installed to control the volume in 'FIXED' mode operation.

Digital Input

AES/EBU Balanced digital connection is recommended for the best reproduction. Use proper cable (AES/EBU standard) to get the better performance. Use 75 Ohms coaxial digital cables for the connection for Coax 1 & Coax 2 inputs. Optical Toslink is a Toshiba standard input and widely used for the connection to Personal Computers, Digital VCRs, Set-top boxes, MP3 players etc. Use Toslink optical cable for the connection.

Digital Output

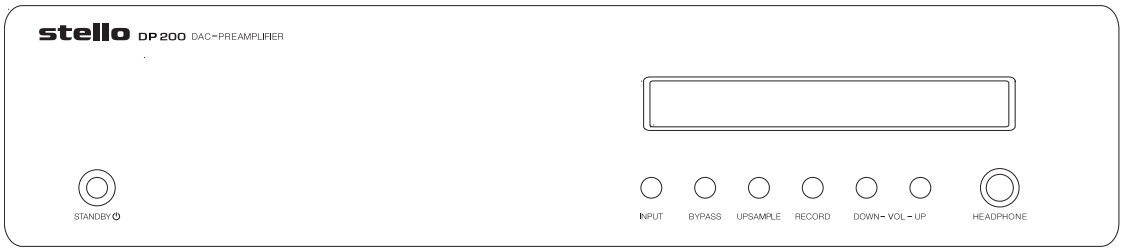
The DP200 sends digital input signal to its 3 digital outputs. You can select input which you want to be directed to the output port by pressing 'RECORD' button.

If you have installed the optional ADC-1 Analog to Digital Conversion Module, you can record your analog sources in either bypass mode (48 kHz sampling rate) or 96 kHz upsampled mode.

FRONT PANEL CONTROL

Buttons and Display

[Fig. 3] The Front Panel



[Fig. 4] The Display Window

STANDBY

The main power switch is located on the rear left side. Once the main power switch is on, 'APRIL MUSIC DP200 DAC/PRE' is showing for 2 seconds and goes to normal display mode as [Fig 4].
Pressing 'Standby' switch again will turn off the system to Standby mode. Whenever you push 'Standby' button, the indication light changes from red to green and green to red to show the system status of 'on and off'.
If a 12V trigger cable is connected to your power amplifier, a push of 'Standby' button will simultaneously operate the power amplifier. * **When in 'Standby' mode, the DP200 memorizes the volume level of the all inputs.**

INPUT

The DP200 has 4 digital inputs and 3 analog inputs. Default input setting is 'Coax1' and the volume level for 'Coax1' is displayed on the upper right of the display window. Output level varies from 00.0 to Max (60.0) in 0.5 steps to give a total of 120 steps. Pressing Input shows the selection as follows.

FIXED mode setting (DAC without P1 Phono Module): Coax1, Coax2, Toslink, AES/EBU and Coax1

FIXED mode setting (DAC with P1 Phono Module): Coax1, Coax2, Toslink, AES/EBU, A1/Ph, and Coax1

VARIABLE mode (default mode) setting (Without P1 Phono Module): Coax1, Coax2, Toslink, AES/EBU, Balanced, Aux1, Aux2 and back to Coax1

VARIABLE mode (default mode) setting (With P1 Phono Module): Coax1, Coax2, Toslink, AES/EBU, Balanced, A1/Ph, Aux2 and back to Coax1

BYPASS

VARIABLE mode only. Connect your main output from your surround processor to this input to bypass the signal. Volume control should be done by the surround processor.

UPSAMPLING

Users can change upsampling rate of DP200 depending on the status of the recordings and their favorite positions. Select sampling rate from the four selections of Bypass, 48 kHz, 96 kHz, and up to 192 kHz.

RECORD

Used to select the input you want to record and for choosing of output upsampling rate of 96 kHz or not.

VOLUME UP / VOLUME DOWN

To control the volume, simply press these up and down buttons. Volume level varies from 00.0 up to Max (which is 60.0) with an interval of 0.5 for a total of 120 steps. All the volume levels are stored and recovered when the unit is on again during the ‘Standby’ mode. Main power-off will erase all the information in DP200.

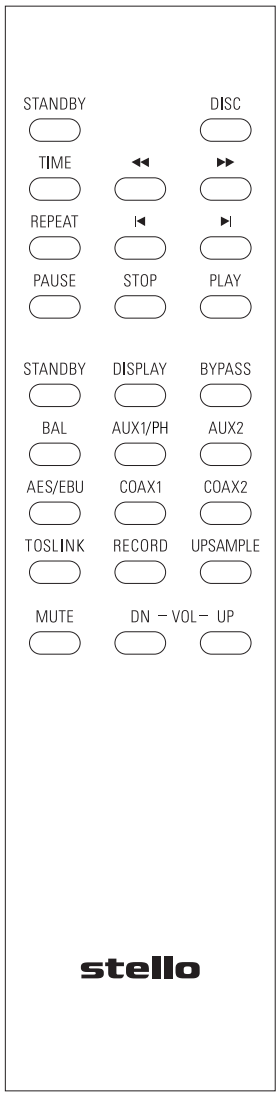
HEADPHONE

Headphone jack is provided for the private and serious listening purpose. When the headphone is connected, the output to the power amplifier is automatically disconnected. Even though DP200 disconnects its main output when headphone is in use, we recommend you to turn the power amplifier off for better and more stable listening.

REMOTE CONTROL

With this remote, you can control the CDT200 CD transport as well as the DP200. All transports using RC-5 code are compatible with this remote control (please refer to manufacturer's manual)

[Fig. 5] The Remote Control



Changing Batteries

AA Batteries are used for the remote control.

- Turn 4 screws counter clockwise to unscrew the upper and lower covers using the supplied screwdriver.
- Carefully grab both button plate and green PCB board together and pull down slowly by half until you can see battery pack.
- Change batteries and push back both button plate and PCB board to their original position.
- Attach the upper and lower covers and tighten the screws.

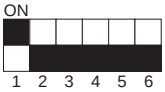
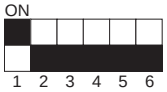
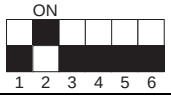
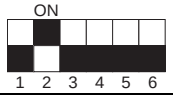
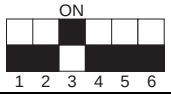
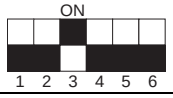
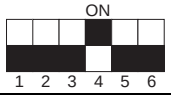
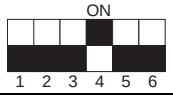
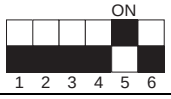
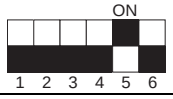
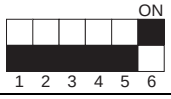
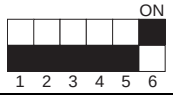
OPTIONAL BOARDS

P1 Phono Equalizer Module

The Phono Equalizer should be installed inside of the DP200 with the component side facing inward.
There is a DIP-switch on the main board underneath of the phono module to set whether the Phono module is installed or not. Default setting without P1 module of SW2 is 'ON' position. With the P1 module installed, this SW2 should be 'OFF' position.
Gain and load impedance can be adjusted by internal DIP-switches.

- **Load Impedance**
  IMP(L) & IMP(R) are for load impedance setting of 6 choices. Place the switch according to your cartridge loading. Starting 1 through 6 reflects loading of 47K, 200, 100, 50, 20, and 10 Ohms respectively. Factory setting is 47K.

[Fig. 6] Load Impedance Setting

Load Impedance	SWITCH		Remarks
	IMP(L)	IMP(R)	
47K Ohms(Ω)			Factory default setting
200 Ohms(Ω)			
100 Ohms(Ω)			
50 Ohms(Ω)			
20 Ohms(Ω)			
10 Ohms(Ω)			

GAIN SETTING

LEFT CHANNEL GAIN SETTING

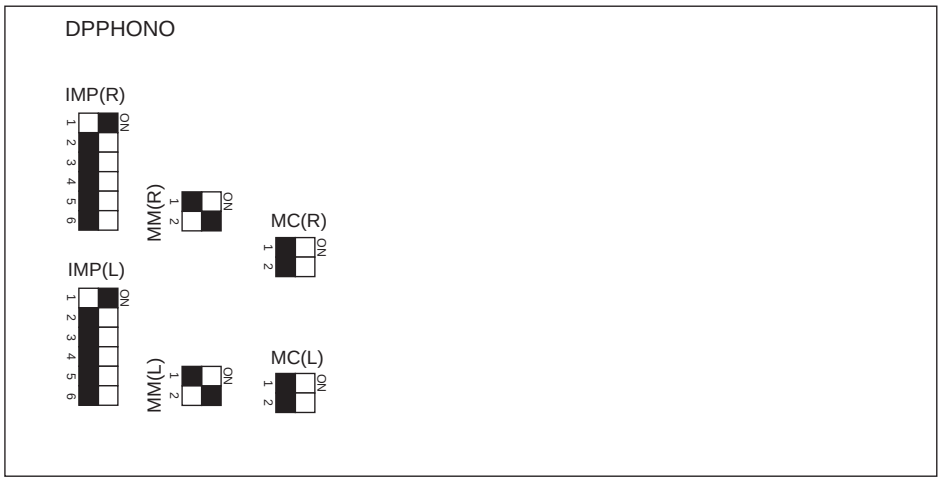
	GAIN	SWITCH		RECOMMENDED CARTRIDGE
		MM(L)	MC(L)	
MM	LOW	1:ON 2:OFF	1:OFF 2:OFF	MM HIGH
	MID*	1:OFF 2:ON	1:OFF 2:OFF	MM MID
	HIGH	1:ON 2:ON	1:OFF 2:OFF	MM LOW
MC	LOW	1:OFF 2:OFF	1:ON 2:OFF	MC HIGH
	MID	1:OFF 2:OFF	1:OFF 2:ON	MC MID
	HIGH	1:OFF 2:OFF	1:ON 2:ON	MC LOW

RIGHT CHANNEL GAIN SETTING

	GAIN	SWITCH		RECOMMENDED CARTRIDGE
		MM(R)	MC(R)	
MM	LOW	1:ON 2:OFF	1:OFF 2:OFF	MM HIGH
	MID*	1:OFF 2:ON	1:OFF 2:OFF	MM MID
	HIGH	1:ON 2:ON	1:OFF 2:OFF	MM LOW
MC	LOW	1:OFF 2:OFF	1:ON 2:OFF	MC HIGH
	MID	1:OFF 2:OFF	1:OFF 2:ON	MC MID
	HIGH	1:OFF 2:OFF	1:ON 2:ON	MC LOW

* Factory default setting

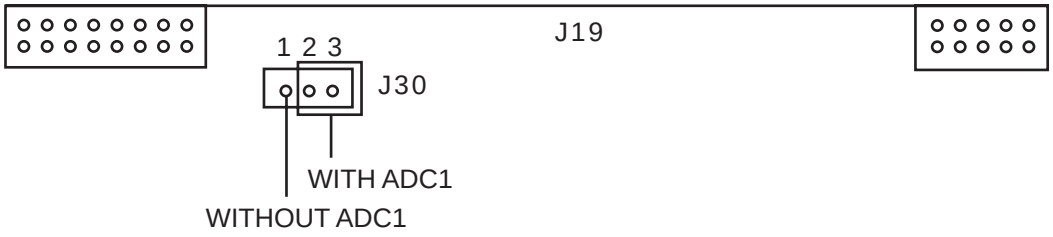
[Fig. 7] P1 Phono Module



ADC-1 Upsampled Digital Output Board

When ADC-1 module is installed, the DP200 automatically recognizes it and does analog to digital conversion. All inputs can be routed to digital output ports by the ‘RECORD’ button. Upsampled output also can be selected by the ‘RECORD’ button. Default setting without ADC-1 module of Jumper (J30) is pin 1-2 connected (WO/ADC). When ADC-1 board is installed, jumper (J30) should be changed to connect pin 2 & 3 as the [Fig 8].

[Fig. 8] Jumper location when ADC1 is installed



SPECIFICATIONS

Digital to Analog Converter

Selectable 24Bit/192kHz Upsampling (Bypass, 48, 96, 24Bit/192kHz)

4 Digital Inputs	AES/EBU, Coax 1,Coax2, Toslink
3 Digital Outputs	AES/EBU, Coax, Toslink
	AES/EBU: 110 Ohms
	COAX 1, 2: 75 Ohms

Preamplifier

Inputs	1 Balanced (XLR), 2 Unbalanced (RCA) (Aux1 can be configured as a A1/Phono)
Analog Input Voltage	AUX 2: Max 1.4 Vrms
	Balanced: Max 1.0 Vrms
Analog Outputs	1 Balanced (XLR), 1 Unbalanced (RCA)
	Max Output: 3.5 Vrms

Digital Volume Control (FIXED, VARIABLE Output Mode, selectable)

Full Balanced Class-A Operation

Headphone Amplifier Interface & Socket

Bypass for Surround Processor

Full Function Remote (Standby, Upsample, Record, Display, Input, Volume, Mute, Bypass)

Optional Boards

P1 Phono EQ Module (MM/MC)

Plug-in PCB Type

Load Impedance: 0, 20, 50, 100, 200, 47k selectable

6 Steps of Gain Setting

ADC1 Upsampled (96kHz/24Bit) Analog-Digital Converter

Plug-in PCB Type

96 kHz upsampled output or bypass output selectable

Dimension (WHD) & Weight

435 x 94.5 x 345(mm), 9 Kg

INTERNATIONAL LIMITED WARRANTY

The warranty service is valid only when purchased from an authorized dealer. A valid proof of purchase must be supplied for all warranty services. Any unauthorized work, modification or service rendered on the player will void the warranty.

Warranty Period	2 years
Date of Purchase	
Authorized Stello Dealer	
Telephone	
Serial No.	
Authorized Stello Service Center	

APRIL MUSIC, INC

www.aprilmusic.com